SMART FRONT END FOR A PRINT COMMUNICATION PROTOCOL

Abstract

A method of interfacing a client with a job-based print device is disclosed. The method disclosed is a method for processing multiple document jobs of varying complexity and purpose, as they arrive from the network, where a job is a transaction or a set of transactions, involving print data and other input and output from the print device, and a document is a single bounded stream of data, which may be a print job or one assertion in the context of a transaction. The method includes receiving client data before it reaches a print communication protocol module. Any or all of the following capabilities may be demonstrated. Raw page description language data is distinguished from other client data and it is determined if the raw page description language includes a request which requires the attention of a specific interpreter and a temporary realignment of job management. The request is processed. An interface which processes client data is disclosed. The interface includes a query parser that detects a query in the client data and routes the query to be answered. A raw page description language data parser receives non-query client data from the query parser and detects raw data. A font download manager establishes an open channel to a print device bypassing a job management queue if the detected raw data includes a font download. A configuration support manager interfaces with a configuration server to accomplish targeted network configuration changes without affecting other components of the print device controller. The interface also includes a document manager, which parses the incoming data stream, preprocesses data on arrival, gleans job description data, and embeds multiple documents in a single job where appropriate.